

YUDIN, Vladimir Andreyevich, prof.; PETROKAS, Leonid Venediktovich,
prof.; RABINOVICH, Ye.Z., red.; KOLESNIKOVA, A.P., tekhn.
red.

[Laboratory manual on the theory of mechanisms and machines]
Laboratornyi praktikum po teorii mekhanizmov i mashin. Moskva,
Fizmatgiz, 1962. 171 p. (MIRA 16:6)
(Mechanisms) (Machinery)

PETROKOV, A. F.

23195 Pitanije tsepey napryazheniya zashchity ot zamykaniy na zemlyu. Elektr.
Stantsii, 1949, No. 7, c. 42-43.

SO: LETOPIS' NO. 31, 1949.

GUSTOV, L.D., inzh. (Sverdlovsk); LEVIN, M.I., inzh. (Sverdlovsk);
MARINOV, A.M., inzh. (Sverdlovsk); MYZIN, L.M., inzh. (Sverdlovsk);
PETROKOV, A.P., inzh. (Sverdlovsk)

Sverdlovsk's 500 kv. substation. Elektrichestvo no.7:61-65
Jl '60. (MIRA 13:8)
(Sverdlovsk--Electric substations)

NAUMCHUK, A.I., inzh.; PETROKOV, A.P., inzh.

Work on electric power plants without attendants at the main control panels. Elek.sta. 32 no.6:82-84 Je '61. (MIRA 14:8)
(Automatic control) (Electric power plants)

PETROKOV, Vladimir, Dr.

Organizational problems in traffic accidents and injuries. Lijec
vjes 82 no.12:945-959 '60.

1. Iz Kirurske klinike Medicinskog fakulteta u Zagrebu
(ACCIDENTS TRAFFIC prev & control)

YUGOSLAVIA

Surgery

PETROKOV, Vladimir, Dr: Surgical Clinic, Medical Faculty, University of Zagreb (Kirurska klinika Medicinskog fakulteta u Zagrebu), Zagreb.

"Operative Treatment of Malformation of the Acromyooclavicular Joint" Zagreb, Radovi medicinskog fakulteta u Zagrebu, Vol 13, No 2, 1965, pp 155-159

Abstract: The usual methods of direct fixation of the acromyooclavicular joint are for the most part unsuccessful because fixation was not sufficiently secure. Since 1952 the Surgical Clinic in Zagreb has applied the method of direct fixation with a compressive screw. The fixation is very stable and also provides rotation movement of the clavicle, without which the movement of the shoulder joint is limited. Until now, 25 patients have been successfully treated. Pictures. 1 Yugoslav and 19 Western references. Manuscript received 10 Nov 1965.

1/1

Osteosynthesis with intramedullary nail using Rush technic.
Acta chir. jugosl. 3 no.3:273-284 1956.

1. Kirurska klinika Medicinskog fakulteta u Zagrebu (predstojnik prof. dr. D. Juzbasic.
(FRACTURES, surgery,
intramedullary nailing, Rush technic (Ser))

OEGERMAN, B.; PETROKOV, V.

Carcinoma of the colon in children. Acta chir. jugosl. 1 no.3:
273-277 1954.

1. Patolosko-anatomski zavod (predstojnik prof. dr. S.Saltykov)
i Kirurska klinika Medicinskog fakulteta u Zagrebu (predstojnik
prof. dr. J.Budisavljevic)
(COLON, neoplasma
surg. in child.)

8
cc
[Handwritten mark]

Phosphorus-bearing horizon of the Mangyabik Trias
etc. J. A. Petrokovich. *Compt. rend. Acad. sci. U.R.S.S.*
S. S. 19781-37(1977). Seven divisions of Triassic forma-
tions are described: (1) Lower Triasse consists of cherry-
colored sandstones, alternating with shales with charac-
teristic thin streaks of conglomerates contg. schist pebbles,
1000 m. in thickness. (2) Gray and greenish shales,
with streaks and lenses of sandstones above, abundant
fauna. Lower Triasse, 350 m. make up this series. (3)
Greenish grayish sandstone, alternating with shales, has
not been identified, 700 m. (4) Rusty brown sandstone
and shales, with faint streaks of limestone, make up this
series. Limestone contains few bivalves and ceratites.
Middle Triasse, 400-500 m. (5) This is a crimson
colored series of sandstones, shales and conglomerates of
minute pebbles, 250 m. (6) This series begins with lime-
stones 20-50 m. thick, above are alternations of argilla-
ceous rocks, marls and limestones. A no. of streaks are
phosphatized; they are white to yellow, argillaceous
rocks contg. up to 15% P₂O₅, 200-240 m. (7) Thin
streaks of gray-brown and dark gray sandstones, limestones
and shales make up this series. Bivalves are in a poor state
of preservation. This series belongs to the Middle or
possible Upper Triasse, contains no P₂O₅, 600 m. Only
a very few samples contg. P were taken, these yielded
to 15% P₂O₅. Too few samples were taken to draw con-
clusions other than P is present to some extent.
H. E. Messmore

ПЕТРОКОВА, К.Г.

BADEYEVA, T.I., kandidat khimicheskikh nauk; MOLOT, L.A., kandidat
khimicheskikh nauk; FRUMINA, N.S., nauchnyy sotrudnik; PETROKOVA, K.G.

Rapid method of determining calcium in slurry. TSement 23 no.3:22-23
My-Je '57. (MLRA 10:7)

(Cement--Analysis) (Calcium) (Trilon B)

L 33076-66 EWT(m)/EXP(j)/T LJP(c) DJ/RM
ACT. NR. AP6024152 SOURCE CODE: UR/0201/66/000/001/0095/0100

45

B

AUTHOR: Belyy, V. A.; Starzhinskiy, V. Ye.; Petrokovets, M. I.

ORG: Division of Polymer Mechanics, AN BSSR (Otdel mekhaniki polimerov AN BSSR)

TITLE: Question of the geometric calculation of a metallocopolymer transmission with cast plastic gear wheels

SOURCE: AN BSSR. Vestsii. Seriya fizika-tehnichnykh nauk, no. 1, 1966, 95-100

TOPIC TAGS: transmission gear, metallocopolymer material, thermoplastic material, die, vacuum casting, centrifugal casting, geometry, mechanical engineering

ABSTRACT: The fundamental principles for the geometric calculation of involute gears with plastic wheels have their basis in the theory of involute gears. However, the need to consider certain peculiarities of plastics (shrinkage, high coefficient of linear expansion, susceptibility to absorption of moisture) complicates the problem of designing and performing the geometric calculation of metallocopolymer gears. Gear wheels of thermoplastic materials can be made by pressure die-casting, centrifugal vacuum casting, etc. Since teeth which do not undergo subsequent machining are molded in a die, special attention must be given to the geometry of the die elements forming the teeth, and hence the geometric calculation of metallocopolymer gear will depend on the geometry of the machine-tool engagement of tool with die or with master wheel. The article shows the possibility of the existence of a gear, one of whose wheels

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ACC NR: AP6024152

(metal) is cut by a broach and whose second wheel (plastic) is obtained in a die prepared by the gear-shaping method. The authors use the widespread method of geometric calculation in which a constant radial clearance is maintained in the gear at any value of the coefficients of displacement. Orig. art. has: 1 figure and 25 formulas. [JPRS]

SUB CODE: 13, 11 / SUBM DATE: 30Nov65 / ORIG REF: 007 / OTH REF: 001

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"APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001240

PETROKOVICH, VY. A.

A. V. KAZAKOV, Trans. Sci. Inst. Fertilizers USSR, 1974, No. 106,
25-45

APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001240

PETROKOVICH YU. A.

PA 4927

USER/Geology
Geological Prospecting

Mar 1947

"Tergen River (on the Occurrence of the Tergen
Sands)," In. A. Petrokovich, 9 pp

"Byull Moskov Obsh Isp Pri, Nova Ser, Otdel Geol,"
Vol XIII, No 3

The Tergen sands represent variety of arenaceous rock
of the Pliocene layers located between the Volga and
Oka Rivers and extended southward to stream network
of the Tergen River. Where these rivers cut the Don-
Nevezitsa Rivers, low island formed, covered by the
same Tergenian deposits. Later, during the preglac-
ial epoch, the Tergen erosion system buried under
ice

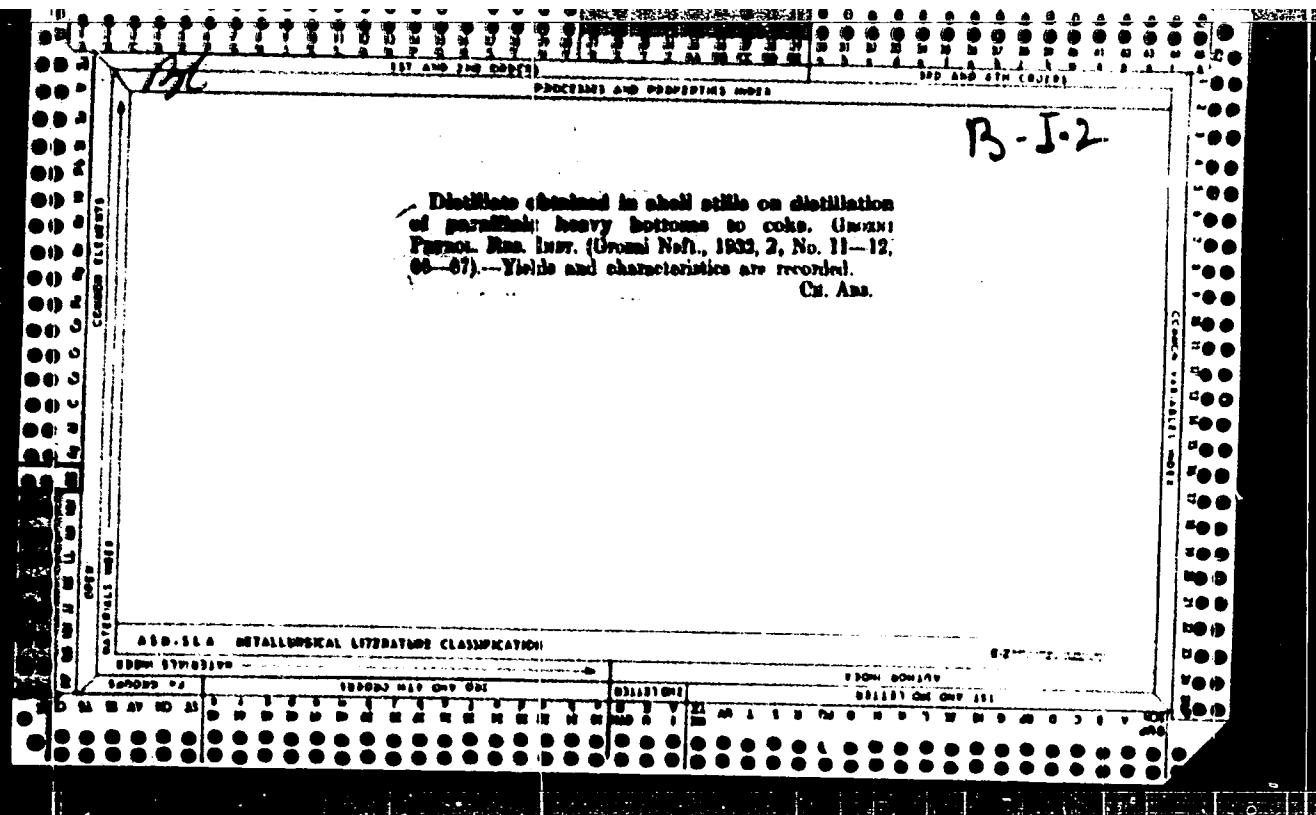
USER/Geology (Contd)

Mar 1947

thick layer of deposits produced by the Don tail of
the Russian glacier. Bed of the Tergen River cut 50-
75 m into the Russian Plain, and can now be traced
over 1,500 km.

LC

4927



PETROLEVICH, L.I.

Anomalous development of the duodenum. Zdrav. Belor. 6 no.4:65-66
(MERA 14:5)
Ap '60.

1. Iz rentgenovskogo otdeleniya (zaveduyushchiy L.T.Yatsenko) 1-y
klinicheskoy bol'nitsy (glavnnyy vrach A.I.Shuba).
(DUODENUM—ABNORMITIES AND DEFORMITIES)

NYESTE, Laszlo; PETRONE GEMER, Marta

Effect of the activating and inhibiting compounds on the
polygalacturonase components of *Aspergillus niger*. Elelm
ipar 15 no.3:84-89 Mr '61.

1. Budapesti Műszaki Egyetem, Mezőgazdasági Kémiai Technológiai
Tanszék

TOROK, Francisc; PETRONI, G.

The competition of the newspaper "Constructorul". Constr
Buc 16 no.736:1 15 F'64.

1. Secretarul asociatiei sportive "Constructorul", Iasi
(for Petroni).

RUMANIA

Ing. M. PETRONI, Regional Planning Office for the Organization of the Suceava Territory (Oficivl Regional de Planificare pentru organizarea teritoriului Suceava.)

"Measures Against Erosion in Pastures and Ensuring Seed Supply in the Suceava Region."

Bucharest, Revista de Zootehnica si Medicina Veterinara, Vol 13, No 5, May 63; pp 9-16.

Abstract: Detailed data are given of yearly and total work done in erosion control and prevention measures such as reforestation and soil drainage with excavation and levelling; grass and bush reseeding and production, mainly during the 1957-1962 period; data on planning and performance, past and intended. Six tables.

1/1

PETRONI, M.

~~APPROVED FOR RELEASE~~ Wednesday, June 21, 2000

CIA-RDP86-00513R0012

Country: Rumania

Academic Degrees: Engineer

Affiliation: Regional Agricultural Section (Sectia Agricola Regionala),
Suceava.

Source: Bucharest, Probleme Zootehnice si Veterinare, No 6, 1961,
pp 12-17.

Data: "A Few Good Results Obtained in the Improvement of Natural
Pastures and Hay Areas in Suceava Regiune."

Petronie, V.

Clarification of liquors obtained by leaching antimony ores with sodium sulphide solution. Y. Ivlevic and V. Petronie. (*Bull. Soc. chim. Belgique*, 1955, 20, 307-314).—Liquors obtained by leaching Sb ores with ap. Na₂S vary in colour from bright yellow to black, owing to colloidal Fe. More dil. Na₂S solutions give darker colours. The Sb content of the liquor increases slightly with the concn. of Na₂S, but the Fe content shows a max., and is very low with conc. Na₂S solutions. Clarification on standing may require >30 days, but occurs in 15 min. if MgCl₂ is added. This addition does not affect the extraction of Sb, except with boiling solutions.

A. B. DENSHAM

YUGOSLAVIA

PETRONIC, Dr Vladimir, and Dr Engr Dusan DJURIC, Institute of Labor Medicine of Serbia (Institut za Medicinu Rada NRS).

"Methyl Alcohol Poisoning."

Belgrade, Glasnik Zavoda za Zdravstvenu Zastitu na Srbije, Vol 11, Nos 1-2, 1962, pp 73-82.

Abstract: [Authors' English summary modified] The authors first describe the physical and chemical properties of methyl alcohol and then discuss the toxic effect, toxic doses, maximum permissible concentrations, pathophysiological effect, the clinical picture, changes in organs, prognosis, and diagnosis. There is a brief review of treatment and preventive medicine.

Twenty-four references, mainly western.

1/1

Petroniljević, Branislav. Postulatsystem der n -dimensionalen euklidischen Geometrie. Srpska Akad. Nauka, Zbornik Radova, Knj. 7, Matematički Institut, Knj. 1, 58-63 (1951). (Serbo-Croatian. German summary)

Versuch eines Postulatsystems der n -dimensionalen Euklidischen Geometrie. Zum Unterschied von früheren Versuchen dieser Art (Euclid, Hilbert, Thiele) werden vom Verfasser folgende drei Neupunkte eingeführt: 1. Abtrennung der Geometrie der eindimensionalen Geraden (Rectometrie) von derjenigen der zweidimensionalen Ebene (Planimetrie). 2. Erhebung des Begriffes der Strecke zu dem Grundbegriffe der Rechnometrie. 3. Einführung der Verknüpfungspostulate in die n -dimensionale ($n \geq 3$) Geometrie.

Author's summary.

Source: Mathematical Reviews, Vol. 13 No. 3

5
Geometrie

Logie

Govt
m/c

MIRKOVIC, Aleksandr; JUZNIC, Nevenka; PETRONIJEVIC, Aleksandr

A vaginal foreign body in a preschool child. Report of a case. Srpski arh. celok. lek. 92 no.7:783-787 Jl-Ag '64.

Suppurative tumors of the rectovaginal region. Ibid.:789-791

1. Ginekolosko-akuserska klinika Medicinskog fakulteta Univerziteta u Beogradu (Upravnik: prof. dr. Bosiljka Milosevic).

PETRONIC-RAJKOVIC, Vera, ing., asistent (Beograd, Kardexijeva 4/V)

The sedimentation of the suspensions made up from powdered Sb_2O_3 , Sb and SiO_2 in amyl acetate. Tehnika Jug 16 no.11:2032-2032c '61.

1. Technological Faculty of the University of Beograd.

JOVANOVIC, Dusan; BROCIC, Mladen; PETRONIJEVIC, Aleksandar; JOVANOVIC-TAJFE, Svetlana

Marfan's syndrome and pregnancy. Med. arh. 19 no.2:57-60
Mr-Ap'65.

1. Ginekolosko akuserska klinika Medicinskog fakulteta u Beogradu (Upravnik: Prof. dr. Bosiljka Milcevic).

DUKIC-TADIC, Mirjana; BERKES, Ivan; POLJAKOVIC, Ljubica; PETRONIJEVIC,
Aleksandar

Histamine and pregnandiol excretion in normal and complicated
pregnancy with special reference to puerperium. Srpski arh.
celok. lek. 92 no.12:1183-1189 D '64.

1. Ginekolosko-akuserska klinika Medicinskog fakulteta Univer-
ziteta u Beogradu (Upravnik: prof. dr. Bosiljka Milosevic) i
Biohemijski institut Farmaceutskog fakulteta Univerziteta u
Beogradu (Upravnik: prof. dr. Ivan Berkes).

PETRONIJEVIC, Z.

"Mastodon Borsonj Hays from the Village of Gradesnica (Morihovo), Macedonia." P. 243. (GLASNIK, SFRIJA A: MINERALOGIJA, GEOLOGIJA, PALEONTOLOGIJA. No. 5, 1952, Beograd, Yugoslavia.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

PETROVIC, Z.

"Finding remnants of MASTODON ARVERNENSIS CROIZET ET JORRET at Sremski Karlovci,
Voivodina", p. 67 (Glasnik. Serija A: Mineralogija, Geologija, Paleontologija,
No. 4, 1951, Beograd)

SO: Monthly List of East European Acquisitions, Vol. 2, No. 9
Library of Congress, September 1953, Uncl.

PETROVICIĆ, Z.; KREUZ, B.

Rezultanti od inicijacije (odlučujuće) u ugovoru između (bezmeđe) i u
inčenjegra. p. 67.

Srpska akademija nauka. Časopis za povijest Jugoslavije. Vol. 17. No. 1.
Beograd, Jugoslavija. Vol. 63, 1981.

Monthly List of East European References (EERL), Vol. 1, No. 1, 1981.
Yugoslavia.

PETRONIJEVIC, Z.

"Fossil remnants of protoscidea from the vicinity of Kraljevo and their stratigraphic significance."

p. 185 (Geoloski Analji Balkanskoga Poluostrava) Vol. 24, 1956
Belgrade, Yugoslavia

SO: Monthly Index of East European Accessions (EFAI) LC. Vol. 7, no. 4,
April 1958

PETROVIC, N.A.

Preparation of chips for production. Bum.prom. 35 no.12:19-20 D '60.
(MIRA 13:12)

1. Glavnyy inzhener Segezhskogo kombinata.
(Wood waste)

PETRONIO, M.A.; ODINTSOV, L.G.

Adjusting "Eleks" electric filters. Bum. prom. 36 no.8:18-20
Ag '61. (MIRA 14:8,

1. Glavnnyy inzh. Segazhskogo tsallyulozno-bumazhnogo kom-
binata (for Petronio). 2. Nachal'nik OTP "Lengiprogazooch-
chistka" (for Odintsov).

(Electric filters)

PETRONIU, Laurentia

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GURICH, N.A.; LISOV, V.I.; PLOTNIKOV, A.Ya.; KOMSHILOV, N.F.;
VOROB'YEVA, Ye.Ya.; BALETOV, A.N.; PETRONIO, V.N.

Butts of pine logs is a valuable raw material. Bum. prom.
36 no.10:16 0 '61. (MIRA 15:1)

1. Tsentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy
institut (for Gurich, Lisov, Plotnikov). 2. Karel'skiy filial
AN SSSR (for Komshilov). 3. Segozhskiy kombinat (for Vorob'yeva,
Balletov, Petronio).

(Pine)
(Gums and resins)

MATYUSHKINA, A.P.; PETRONIO, V.N.; KOMSHILOV, N.F.; KATAYEV, A.I.

Stearine from tall oil pitch. Bum.prom. 33 no.11:19-21 N
'58. (MIRA 13:8)

1. Segezhskiy ordena Lenina tsellyulozno-bumazhnyy kombinat (for
Matyushkina, Petronio). 2. laboratoriya lesokhimii Karel'skogo
filiala AN SSSR (for Komshilov, Katayev).
(Tall oil)
(Stearin)

FRONESCU,E.,dr.; PETRONIU,L.,dr.; CONSTANTINESCU,S.,chimist

Study of renal elimination of water during chronic hepatitis.
Med. int.,Bucur. 12 no.2:269-277 F '60.

1. Incrare efectuata in Clinica a V-a medicala, I.M.F.,Bucaresti.
(HEPATITIS, metabolism)
(WATER,metabolism)
(LIVER,metabolism)

SUKHARINA, A.N.; PETROPOL'SKAYA, A.A.

New region with high-alumina fire clays in Western Siberia.
Sov. geol. 3 no.10:146-149 0'60.

(MIRA 13:10)

1. Zapadno-Sibirskoye geologicheskoye upravleniye.
(Siberia, Western--Fire clay)

AMINEV, Alekseandr Mikheylovich, prof.; PETROPOL'SKAYA, N.Ye., red.;
YASHEN'KINA, Ye.A., tekhn.red.

[Hemorrhoids] Gemorroi. Kuibyshev, Kuibyshevskoe knizhnoe
izd-vo, 1959. 114 p. (MIRA 14:4)
(HEMORRHOIDS)

PETRONAYTIS, I. P. (Vet.)

"Influence of environment on the illness of lambs with dysentery."

SO: Vet. 29 (2) 1952, p. 23

Central Zooveterinary District, Kineshemskiy rayon, Ivanov Oblast.

PETRONAYTIS, I. P.

Sheep - Diseases

Influence of the external environment upon dysentery in lambs. Veterinariia,
29, no. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953? Unclassified.

MILKOVIC, Aleksandar; JEVANOVIC-LUKOVIC, Radmila; MTHONIĆEVIC, Aleksandar

Ju. enile uterine hemorrhage and thrombasthenia. S.;ekt art.
celok. lek. 42 ne.1813-106 Ja '64

1. Ginekološko-skušarska klinika Medicinskog fakulteta Univer-
ziteta u Beogradu (Upravnik: prof. dr. Bošiljka Milesević).

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CIA-RDP86-00513R001240

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APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001240

PETRONIS, Z.

Tuberculosis control in rural areas. Sveik. Apsaug. no.3:
46-50 '64.

1. Kauno rajono "Keliai i komunizma" kolūkio felceriu punkto
vedėjas.

PETRONIS, Z.

Experience with tuberculosis control in a rural area. Sveik.
apsaug. 9 no.3:46-50 Mr'64

l. Kauno rajono "Keliai i komunizma" kolukio foelceriu punkto
vedejas.

*

PETROPAVLOV, G.M., inzh.; SNEGIREV, M.N., inzh.

Measurement and recording of the surface temperature of drying
cylinders. Bum.prom. 34 no.1:15-17 Ja '59. (MIRA 12:1)
(Papermaking machinery) (Temperature--Measurement)

MNYUKH, Yu.V.; PETROPAVLOV, N.N.; KITAYGORODSKIY, A.I.

Lamellar growth of crystals in polymorphous transformation. Dokl.
AN SSSR 166 no.1:80-83 Ja '66. (MIRA 19.1)

1. Institut elementoorganicheskikh sovedjeniy AN SSSR. Submitted
April 27, 1965.

ASADOV, Yu.G.; KORESHKOV, B.D.; PETROPAVLOV, N.N.; KOZHIN, V.M.; NYUKH, Yu.V.

Measuring the density of the α and β phases of p-dichlorobenzene
in a gradient tube. Kristallografika 9 no.6:921-923 N-D '64.
(MIRA 18:2)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

PETROPAVLOV, Ye.P., inshener.

Prevention of intense production noises. Besop. truda v prom. 1
no. 6:38 Je '57. (MIRA 10:7)

1. Zavod "Leninskaya kuznitsa."
(Noise) (Machinery)

PETROPAVLOV, Ye.P., inzh.

Pneumatic drives for casements. Bezop.truda v prom. 3 no.2:37
y '59. (MIRA 12:2)
(Factories--Heating and ventilation)

137-58-6-11973

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 6, p 112 (USSR)

AUTHOR: Petropavlova, Z.V.

TITLE: Segregation Used to Clean an Electrolyte (Primeneniye segre-gatsii dlya ochistki elektrolita)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 9, pp 16-19

ABSTRACT: The experience of the Noril'sk Kombinat and of preliminary experiments at the Moscow electrolytic copper plant resulted in the starting in January, 1956, of a series of ten cells for electrolytic decoppering of solutions by segregation of the solution (layering of the electrolyte [E] into rich and poor strata in terms of CuSO₄ contents as electric current passes through the E). The E is fed to the lower portion of the bath. 90% is withdrawn from the bath through the bottom, and 10% of the E, low in Cu, through the top over a special sill. The E contained a bi-monthly average of 150.5 g H₂SO₄ and 63.1 g CuSO₄·5H₂O/liter, while after decoppering the E contained 173 g H₂SO₄ and 8.3 g CuSO₄·5H₂O/liter. The mean duration of the cycle of electrolysis was 12 hours. The cathode Cu in the segregation baths was of MO grade. The advantages of

Card 1/2

137-58-6-11973

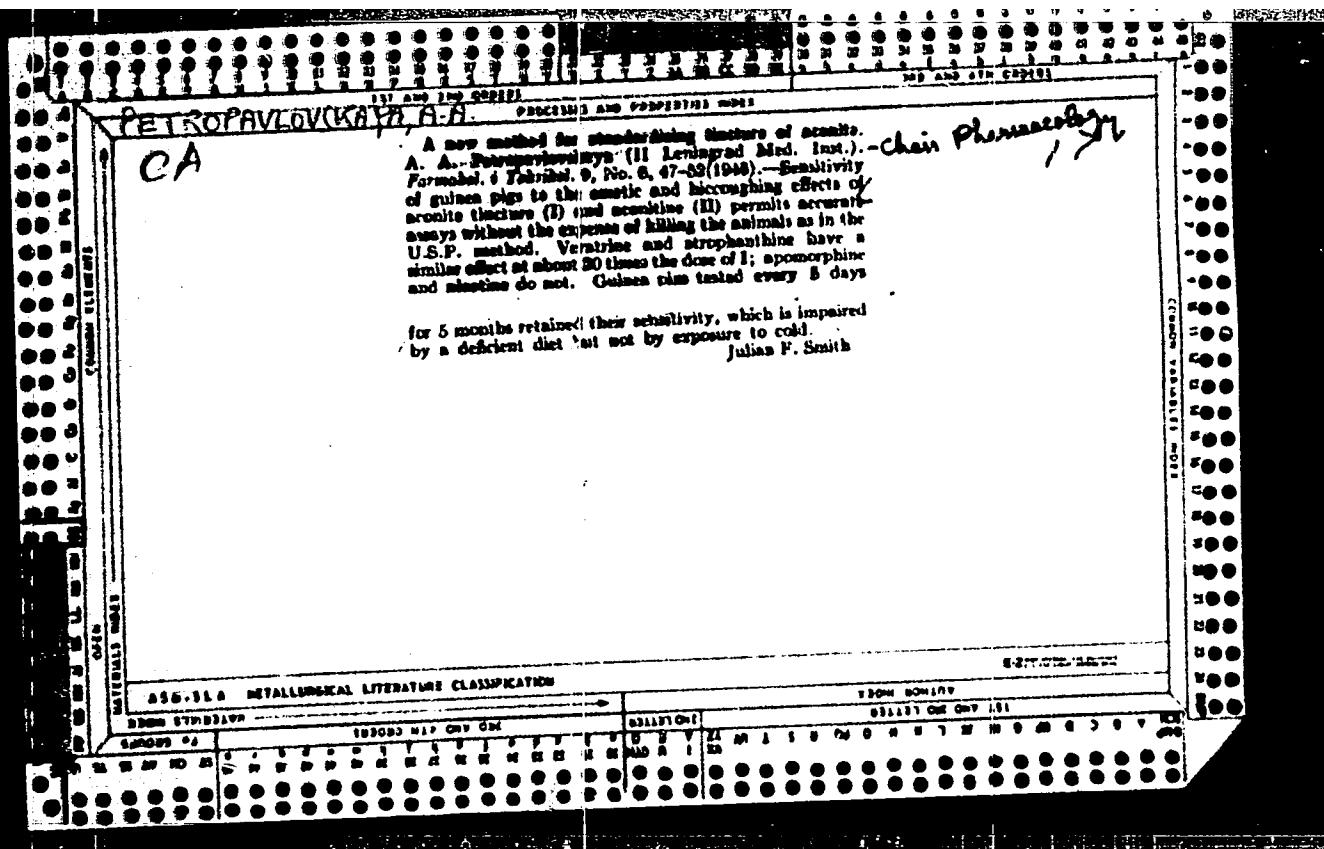
Segregation Used to Clean an Electrolyte

decoppering the E by segregation are: 1) reduction of Cu loss in the solutions going to the regeneration shop, and a monthly saving of 27-34 t CuSO₄·5H₂O; 2) shortening of the time required for the decoppering cycle from 20 to 12 hours, thus saving power, and 3) reduction in the NiSO₄·7H₂O content of the E, since reduction in the Cu contents permits the volume of solution fed for decoppering to be increased without impairing the fundamental electrolysis process.

N.P.

1. Electrolytes--Properties 2. Electrolytes--Performance 3. Copper--Electrolysis

Card 2/2



PETROPAVLOVSKIY, A. A.

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 532 - I

BOOK

Call No.: AF603914

Author: PETROPAVLOVSKIY, A. A.

Full Title: AN APPROXIMATE METHOD OF DETERMINATION OF CRITICAL
FORCES IN ELASTIC SYSTEMS

Transliterated Title: Ob odnom priblizhennom sposobe opredeleniya
kriticheskikh sil dlya uprugikh sistem

PUBLISHING DATA

Originating Agency: Moscow Institute of Railroad Transport Engineers
im. Stalin (MIIT), Trudy, Issue 76, Construction Mechanics

Publishing House: State Publishing House of Railroad Transport

Date: 1952 No. pp.: 8 (72-79) No. of copies: 1,000

Editorial Staff

Editor-in-Chief: Litvin, G. A., Kand. of Tech. Sci.

Editors: Profs., Doc. of Tech. Sci. Prkof'yev, I. P.,
Pratusevich, Ya. A., and Sinel'nikov, V. V.

Others: The preface was written by Gerasimov, A. S., Chief of MIIT,
General Director of Traffic III Rank

PURPOSE: A paper intended for engineering-technical and scientific
workers of railroad transport.

TEXT DATA

Coverage: The author gives in this article an approximate method of

1/2

PETROPAVLOVSKIY, A. A.

Dissertation: "Effect of the Behavior of a Load on the Magnitude of the Coefficient of Stability of Bridge Arches." Cand Tech Sci, Moscow Inst of Railroad Transport Engineers, Moscow, 1953. (Referativnyy Zhurnal--Mekhanika, Moscow, Aug 54)

SO: SUM 393, 28 Feb 1955

MONASTYRSKAYA, B.I.; PETROPAVLOVSKAYA, A.A.; TSINZERLING, V.D., professor,
chlen-korrespondent Akademii meditsinskikh nauk SSSR, zaveduyushchiy;
ANICHKOV, S.V., professor, deystvitel'nyy chlen Akademii meditsinskikh
nauk SSSR, zaveduyushchiy.

Styptic and wound-healing effect of plantain. Farm. i toks. 16 no.2:30-
32 Mr-Ap '53. (MIRA 6:6)

1. Akademiya meditsinskikh nauk SSSR (for Tsinzerling and Anichkov).
2. Kafedra patologicheskoy anatomii Leningradskogo sanitarno-gigiyeni-
cheskogo meditsinskogo instituta (for Tsinzerling, Monastyrskaya and
Petropavlovskaya). 3. Kafedra farmakologii Leningradskogo sanitarno-
gigiyenicheskogo meditsinskogo instituta (for Anichkov, Monastyrskaya and
Petropavlovskaya). (Hemostatics)

KRASNOV, M.M.; PETROPAVLOVSKAYA, G.A.; KHVATOVA, A.V.

Experimental study of the reaction of a rabbit's eye to the
implantation in the anterior chamber of an artificial crys-
talline lens made of glass or plastic. Uch.zap. GnII glaz.
bol. no.8:163-170:63. (MIRA 16:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut glaz-
nykh bolezney imeni Gel'ngol'tsa.
(CRYSTALLINE LENS) (EYE-SURGERY)

PETROPAVLOVSKAYA, G.A.

Cataract following experimental hemorrhage into the vitreous body. Uch.zap. GNII glaz.bol. no.8:55-61'63. (MIRA 16:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut glaznykh bolezney imeni Gel'mogol'tsa.
(CATARACT) (VITREOUS HUMOR)
(HEMORRHAGE)

SAKSONOVA, Ye.O.; PETROPAVLOVSKAYA, G.A.; KOPTSIOVSKAYA, R.S.

Use of andaxin in cataract extraction. Uch. zap. GNII glaz.
bol. no.8:109-112'63. (MIRA 16:9)

1. Gosudarstvennyy nachno-issledovatel'skiy institut glaznykh
bolezney imeni Gel'mgol'tsa.
(MEPROBAMATE) (CATARACT)

PETROPAVLOVSKAYA, G. A., Cand Med Sci -- (diss) "Hemorrhage in a vitreous body according to experimental and clinical elucidation." Moscow, 1960. 19 pp; (Novosibirsk State Medical Inst of the Ministry of Public Health RSFSR); 250 copies; price not given; (KL, 17-60, 172)

PETROPAVLOVSKAYA, G.A.

Extravasation into vitreous body from the experimental and clinical viewpoints. Vest.oft. 72 no.5:13-19 S-O '59. (MIRA 13:3)

1. Nauchno-issledovatel'skiy institut glaznykh bolezney imeni Gel'm-gol'tsa (direktor A.V. Roslavtsev).
(VITREOUS BODY, dis.)

PINKERL'SHTERN, D.N.; PETROPAVLOVSKAYA, I.B.

Volumetric determination of manganese in ores and rock with the use of cobaltous persulfate. Zhur. anal. khim. 10 no.3:180-183 My-Je '55.
(MLRA 8:8)

1. Tsentral'naya laboratoriya Uralgeolupravleniya.
(Manganese) (Mineralogy, Determinative) (Catalysts, Cobalt)

PETROPOLSKAYA

Volumetric cobalt pernitrite method for determination of manganese in ores [Zhur. Nauk. Khim. 10, 189 (1931); J. Russ. Chem. Soc., 1903, 10, 169-71 (1905) (Bull. translation)]. In the proposed procedure, Ag is replaced by Co in H_2O_2 as catalyst for the oxidation of Mn. The catalyst soln. should contain $CoSO_4 \cdot 7H_2O$ 0.5 and $CuSO_4 \cdot 5H_2O$ 2%. The Co is conveniently obtained from the filtrate and wash water from the K detn. by the cobaldithionite method. To detn. Mn place 0.5-1.0 g. of finely ground sample in a moistened 250-ml. flask and add 15 ml. aqua regia. After evolution of gases ceases add 10 ml. 18*N* H_2SO_4 , and evap. to appearance of white fumes. Rinse the walls and again evap. to thick fumes. Cool, add 100-120 ml. H_2O , 20 ml. acid mist, (H_2O 750 + H_2SO_4 (1.84) 125 + H_2PO_4 (1.7) 125 ml.), and heat until dissolved. Add 10 ml. catalyst, and 20 ml. 25% $(NH_4)_2S_2O_8$. Boil to complete development of $HMnO_4$ color, allow to stand warm for 10 min., to destroy excess $S_2O_8^{2-}$, cool, and titrate with arsenite soln. For checking, heat the soln., reoxidize with $S_2O_8^{2-}$, cool, and repeat the titration. This procedure gave good results for up to 5-6 mg. Mn. For higher quantities of Mn, up to 80 mg. Mn per 250-350 ml., in addition to 20 ml. Co-Cu catalyst, add 1 ml. 0.2% AgNO₃.

M. Horsch

(1)

PETROPAVLOVSKAYA, I.B.

1011. Volumetric persulphate - cobalt method of determining manganese in ores and minerals.
D. N. Finkelstein and I. B. Petropavlovskaya
(Central Lab. of Geol. Survey USSR Ministry of
Aust. Min., SSSR, 1955, 10 (3), 180-183.) With
ores containing small amounts (0.02 to 0.46 per
cent.) of Mn²⁺, a catalyst containing 0.8 per cent. of
 $\text{CoSO}_4 \cdot 3\text{H}_2\text{O}$ and 3 per cent. of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ can
completely replace AgNO_3 in the persulphate-
arsenite method of determining Mn. The sample
(0.5 to 1.0 g) is heated with 15 ml of aqua regia
and then evaporated to fumes with 10 ml of dil.
 H_2SO_4 (1 + 1). The sides of the vessel are washed
down with water and the contents are again
evaporated to fumes. The liquid is cooled and
100 to 130 ml of water and 20 ml of mixed acid
(750 ml of water, 125 ml of conc. H_2SO_4 and 125 ml
of H_3PO_4 , sp. gr. 1.7) are added. The soln. is
heated to dissolve the salts and boiled with 10 ml of
catalyst soln. and 20 ml of 25 per cent. ammonium
persulphate soln. After decompr. of the excess of
persulphate, the soln. is cooled and titrated with
arsenite. With ores containing large amounts of
Mn, a small amount of AgNO_3 is essential in the
catalyst soln. The manganese ore (0.1 to 0.3 g) is
then heated with 20 ml of phosphoric acid (sp. gr.
1.7) at 330° to 360° C. until dark particles disappear.
The solution is mixed with 200 to 300 ml of water,
20 ml of the cobalt - copper catalyst soln. and 1 ml
of 0.2 per cent. AgNO_3 soln., and 30 ml of 25 per
cent. ammonium persulphate soln. are added slowly
to the hot soln. The soln. is boiled for 4 or 5 min.,
kept hot for 10 to 12 min. to destroy the excess of
persulphate, then cooled and titrated with 0.2 M
ferrrous ammonium sulphate containing 380 ml of
conc. H_2SO_4 per litre, with 5 drops of 0.1 per cent.
diphenylaminosalphonic acid soln. as indicator
towards the end of the titration. G. S. Smith

OZERETSKOVSKIY, N.A.; DZHEKSENBAYEV, O.Sh.; PETROPAVLOVSKAYA, I.S.

Distribution of sekazin in the bodies of experimental animals.
Antibiotiki 7 no.4:356-358 Ap '62. (MIRA 15:3)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii
infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh.
Planel'yes) Instituta epidemiologii i mikrobiologii imeni N.F.
Gamalei AMN SSSR.
(ANTIBIOTICS)

PETROPAVLOVSKAYA, I.S.

Role of antibacterial substances in the body in the determination
of antibiotics by the agar diffusion method; the action of anti-
bacterial substances on various micro-organisms. Antibiotiki 9
no.1:76-81 Ja '64. (MIRA 18:3)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii
infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh.
Planet'yes) Instituta epidemiologii i mikrobiologii AMN SSSR
imeni Gamalei, Moskva.

PETROPAVLOVSKAYA, I. S.

KOPTSIOVSKAYA, L.S.; PETROPAVLOVSKAYA, I.S.

Treatment of peritonitis by intra-peritoneal administration of penicillin. Sovet. med. 16 no. 7:8-9 July 1952. (CML 22:4)

1. Candidate Medical Sciences for Koptsinovskaya. 2. Of Moscow Municipal Scientific-Research Institute for First Aid imeni N. V. Sklifosovskiy (Director -- B. V. Nifontov; Head Physician -- Prof. B. A. Petrov).

PETROPAVLOVSKAYA, I.S.

Determination of sterility of mycerin preparations with the aid of
ion exchange resins. Antibiotiki 6 no.2:172-178 F '61.
(MIRA 14:5)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii infektsiy
(zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh.Planel'yes)
Instituta epidemiologii i mikrobiologii imeni N.F.Gamalei AMN SSSR.
(MYCERIN) (ION EXCHANGE RESINS)

M-4

USSR / Cultivated Plants. Fodders.

Abs Jour: Ref Zhur-Biol., No 6, 1958, 25110

Author : Petropavlovskaya, K. I.

Inst : Stavropol Agricultural Institute

Title : A Study of the Crosses Between the Jerusalem
Artichoke and the Sunflower in the Quality of
an Ensilage CropOrig Pub: Tr. Stavropol'sk. s.-kh in-ta, 1956, vyp. 7,
151-159

Abstract: Observations were made at the experimental field
of the institute in 1950-1952 on the growth, de-
velopment and productive capacity of the hybrids
between the Jerusalem artichoke and the Severo-
Osetinskiy 71 (G-71-39), the Maykopskiy 33-650,
the Stavropol'skiy sunflowers; two Jerusalem
artichoke varieties, the Vadim and Belyy Uro-

Card 1/3

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Card 2/3

USSR / Cultivated Plants. Fodders.

M-4

Abs Jour: Ref Zhur-Biol., No 6, 1958, 25110

Abstract: but it was even lower than the Jerusalem artichokes. The production of tubers began in the first half of July, preceding with greater intensity in September and October. The Stavropol'skiy hybrid took first place in tuber output, yielding 302 centners per ha. The harvest of hybrids and the Jerusalem artichoke of the 2nd year in use was close to the yield at the 1st year in use. -- S.B.

Card 3/3

99

"APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001240

PETROPAULOVSKAYA, L.
PETROPAULOVSKAYA, L., kand. istor. nauk.

Liusik Lisinova. Rabotnitsa 35 no.11:8-9 N '57.
(Lisinova, Liusia Artem'evna)

(MIRA 11:2)

APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R001240

SOKOLOV, I.Yu.; AYDIN'YAN, N.Kh.; BELEKHOVA, V.N.; BRODSKIY, A.A., starshiy nauchnyy sotrudnik; GLEBOVICH, T.A.; DALMATOVA, T.V.; KOMAROVA, A.I.; KOMAROVA, Z.V.; KOPYLOVA, M.M.; KUDRYAVTSEVA, M.M.; LIBINA, R.I.; LOGINOVA, L.G.; MARGOLIN, L.S.; MARKOVA, A.I.; MEDVEDEV, Yu.L.; MILLER, A.D.; MULIKOVSKAYA, Ye.P.; NECHAYEVA, A.A.; OZEROVA, N.V.; PALKINA, I.M.; PETROPAVLOVSKAYA, L.A.; POPOVA, T.P.; REZNIKOV, A.A.; SERGEYEV, Ye.A.; SETKINA, O.N.; STEPANOV, P.A.; SUVOROVA, Ye.G. [deceased]; SHERGINA, Yu.P.; PANOV, A.I., red.izd-va; IVANOVA, A.G., tekhn.red.

[Methodological handbook on the determination of microcomponents in natural waters during prospecting for ore deposits] Metodicheskoe rukovodstvo po opredeleniiu mikrokomponentov v prirodnykh vodakh pri poiskakh rudnykh mestorozhdenii. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1961. 287 p.

(MIRA 14:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii (for Sokolov, Brodskiy, Glebovich, Ozerova, Kudryavtseva, Loginova, Markova, Medvedev, Belekhova, Palkina,
(Continued on next card)

SOKOLOV, I.Yu.---(continued) Card 2.

Popova, Petropavlovskaya). 2. Institut geologii rudnykh mosto-rozhdeniy, petrografii, mineralogii i geokhimii AN SSSR (for Aydin'yan). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i tekhniki razvedki (for Miller, Sergeyev, Margolin). 4. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut (for Mulikovskaya, Reznikov). 5. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya (for Komarova, A.).

(Prospecting--Geophysical methods)
(Water, Underground--Analysis)

USSR/General and Systematic Zoology. Insects. Systematics and Faunistics P

Abs Jour : Ref Zhur - Biol., No 3, 1959, No 11491

Author : Petropavlovskaya, M.B.

Inst : Altay Agricultural Institute.

Title : Species Distinctions of the Eggs and Larvae of the Bug of the Genus Eurydema Lap. in Western Siberia.

Orig Pub : Tr. Altaysk. s.-kh. in-ta, 1957, vyp. 5, 366-371.

Abstract : Classification tables of eggs and larvae (the latter separately per each stage of development) of the four species of genus Eurydema, based principally on color differences.

Card : 1/1

- 5 -

A

26

"Polydene" drying oils. M. M. Petropavlovskaya and V. V. Ilin. Byull. Obzora Opes. Zashtraenok Prom. 1939, No. 8, 2b-0.—"Polydene" (I) is a material obtained by thermal catalytic treatment of the by-products of the synthetic rubber industry. Its compo. is still unknown, but the presence of olefins (C₁₀, C₁₁, C₁₂), as well as higher alks, aliphatics and ketones is established. It can be used as such; it can be oxidized, dehydrated and used with vegetable oils; or it can be esterified (through its alc. groups) with tall oil. I had the following const.: sp. gr. 0.925, sapon. no. 40, acid value 0.6, I value 210, flash point 125°, drying to dust 144 hrs., drying with 5% dicer 66 hrs., with 10% dicer 50 hrs., with 16% dicer 30 hrs., with 20% dicer 20 hrs. I and its mixt. with a drying oil proved to be unsatisfactory. Oiled and dehydrated I as well as I esterified with tall oil are also unsatisfactory. The films dry slowly, are unstable to water, are rapidly and are insufficiently elastic. David Ackroyd
See ad elsewhere in file

APPENDIX METALLURGICAL LITERATURE CLASSIFICATION

CLASS NUMBER

Wet mixing of pigments. N. A. Lukhina, M. M. Pechayeva and N. M. Bytlyakova. Byull. Obzorov po Tekhnicheskoy Literatury i Promst. 1960, No. 5, 16-19. Wet mixing of pigments consists of exchanging water with oil by the pigments for oil. The advantages of the method are: use of less oil; shorter time of pigment grinding; less dust formation; separ. of water-and, oil from the pigment. The transfer from a water to an oil paste takes place easily with carbon blacks and with lead whites, while zinc whites are harder to work and maltese and others make the process too difficult for practical application. Oil or Ph salts of fatty or naphthenic acids were used in wet mixing for exchanging water for oil on the pigments. The paint films from the wet-mixing process were similar to the dry-mixed films.

David Akeris

ASV-SEA METALLURGICAL LITERATURE CLASSIFICATION

62-7000-142-000

PETROPAVLOVSKAYA, N.A.

Antitoxic immunity in healthy children with respect to scarlet fever. Trudy Len. inst.epid. i mikrobiol. 18:67-72'58.
(MIRA 16:7)

1. Iz laboratorii kapel'nykh infektsiy Leningradskogo instituta epidemiologii, mikrobiologii i gigiyeny imeni Pastera -(zav. N.N.Rubel').

(IMMUNITY) (SCARLET FEVER)

PETROPAVLOVSKAYA, N.A.

Characteristics of subclinical forms of streptococcal infection.
Trudy Len.inat.epid. i mikrobiol. 18:73-80'58. (MIRA 16:7)

1. Iz laboratorii kapel'nykh infektsiy Leningradskogo instituta
epidemiologii, mikrobiologii i gigiyeny imeni Pastera (zav. N.N.
Rubel').

(STREPTOCOCCAL INFECTIONS)

PETROPAVLOVSKAYA, V. A.; SMIRNOVA, A. M.; ZALESSKAYA, V. V.;
FILATOVA, Z. V.; RUBEL, N. N.; TIKHONOV, V. I.; SOFRONOV, B. N.

"Special features of the microbiological immuno-epidemiological
characteristics of scarlet fever treated with penicillin."

Report submitted at the 13th All-Union Congress of Hygienists,
Epidemiologists, and Infectionists. 1959

ZHISLINA, N.M., kand.med.nauk, PETR PAVLOVSKAYA, N.I., DIPLO, A.S., doktor
med.nauk

X-ray diagnosis of retroperitoneal subdiaphragmatic abscesses.
[with summary in English]. Khirurgia 34 no.4:42-45 Ap '58 (NRA 11:7)

1. Iz 1-y kafedry rentgenologii i radiologii (zav. - zaluzhenyy
deyatel' nauki prof. S.A. Reynberg) TSentral'nogo instituta
usovershenstvovaniya vrachey (dir. V.P. Lebedeva) na baze bol'nitsy
imeni N.P. Botkina (glavnnyy vrach - prof. A.N. Shabunov).

(RETROPERITONEAL SPACE, abscess
subdiaphragmatic, x-ray diag. (Rus))
(DIAPHRAGM, abscess
space (Rus))

PETROPAVLOVSKAYA, N. N.

Cand Biol Sci - (diss) "Comparative-histochemical data on the activity of phosphatase and on the lead-affinity [plyumbofiliya] of the sensitive and vegetative neurons of horned cattle." Moscow, 1961. 12 pp; (Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev); 200 copies; price not given; (KL, 6-61 sup, 208)

MASHKOV, I.P.; MERZLYAKOVA, M.V.; PETROPAVLOVSKAYA, N.P.

First All-Russian Congress of Roentgenologists and the first All-Russian
Conference on Fluorography. Sov. zdrav. Kir. no.3:59-62 My-Je '62.
(MIRA 15:5)

(RADIOLOGY, MEDICAL--CONGRESSES)
(DIAGNOSIS, FLUOROSCOPIC--CONGRESSES)

PETROPAVLOVSKAYA, N.Y.

Structural characteristics of the mucosa of the urinary tract.
[with summary in English]. Trudy ISGMI 42:99-107 '58 (MIRA 11:12)

1. Kafedra gistolologii i embriologii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy - chlen-korrespondent AMN SSSR, prof. S.I. Shchelkunov).
(BLADDER, anat. & histol.
mucosal histol. in cat. (Rus))

PETROPAVLOVSKAYA, N.V.

Regeneration of the ureter wall in injuries. Trudy ISGMI 16:151-159
'53. (MLRA 10:8)

1. Kafedra gistolologii i embriologii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (sav. kafedroy prof. S.I.Shchelkunov)

(URETERS, physiology,
regen. in cats)

(REGENERATION,
ureters, in cats)

RUMANOV, Boris Arkad'yevich; PETROPOL'SKAYA, N.Ye., red.

[Program control of rolling and bending mills] Prog-
rammnoe upravlenie prokatno-gibochnymi stankami.
[Kuibyshev] Kuibushevskoe knizhnoe izd-vo, 1965. 61 p.
(MIRA 18:11)

KARETIN, Mikhail Alekseevich; PETROPOL'SKAYA, N.Ye., red.; YASHEN'-
KINA, Ye.A., tekhn.red.

[Mechanizing some operations in manufacturing antifriction
bearings] Mekhanizatsiya nekotorykh operatsii v proizvodstve
podshipnikov kachenija. Kuibyshev, Kuibyshevskoe knishnoe izd-vo,
1959. 39 p. (MIRA 13:5)

1. Master 4-go gosudarstvennogo ordena Lenina podshipnikovogo
zavoda; chlen prezidiuma oblastnogo Soveta Vsesoyuznogo obshchestva
izobretateley i ratsionalizatorov; chlen oblastnogo pravleniya
Nauchno-tekhnicheskogo obshchestva mashinostroitel'noy promyshlennosti (for Karetin).

(Bearing industry--Technological innovations)

REZNIKOV, Aron Naumovich, kand.tekhn.nauk; PETROPOLO'SKAYA, N.Ya., red.;
YASHEN'KINA, Ye.A., tekhn.red.

[Temperature and cooling of metal-cutting tools] Temperatura
i okhлazdenie rezhushchikh instrumentov. Kuibyshev, Kuiby-
shevskoe knizhnoe izd-vo, 1959. 171 p.

(MIRA 13:12)

(Metal-cutting tools--Cooling)

KHOKHRIN, Nikolay Konstantinovich; PETROPOLOVSKAYA, N.Ye., red.;
YASHEN'KINA, Ye.A., tekhn.red.

[Cellular concretes made with local materials] Iacheistye
betony na mestnykh materialakh. Kuibyshev, Kuibyshevskoe
knizhnoe izd-vo, 1959. 31 p.
(Concrete) (MIRA 13:5)

ATANAZEVICH, Yekaterina Ivanovna; YAKUSHEV, Aleksey Petrovich; DYRIN,
Vasiliy Grigor'yevich; PUTCHIN, N.I., prof., doktor khimicheskikh
nauk, nauchnyy red.; PETROPOL'SKAYA, N.Ye., red.; YASHEN'KINA, Ye.A.,
tekhn.red.

[What is produced from petroleum and gas] Chto poluchaiut iz nefti
i gaza. Kuibyshev, Kuibyshevskoe knizhnoe izd-vo, 1958. 28 p.
(MIRA 12:9)

(Petroleum chemicals) (Gas, Natural)

PETROPAVLOVSKAYA, R. N.

USSR/Agriculture - Plant Physiology

Card : 1/1

Authors : Britikov, E. A., and Petro pavlovskaya, R. N.

Title : Effect of ferments, vitamins and auxin type stimuli on the binding of seeds during the sprouting of rye

Periodical : Dokl. AN SSSR, 97, Ed. 2, 341 - 344, July 1954

Abstract : The physiological and biochemical effect of ferments, vitamins and auxin type stimuli on the binding of rye seeds during sprouting was investigated. Results are given in tables. Sixteen references.

Institution : Acad. of Sc. USSR, The K. A. Timiryazev Institute of Plant Physiology

Presented by : Academician A. L. Kursanov, May 3, 1954

Petropavlovskaya, R. V.

Petropavlovskaya, R. V.

Structural isomorphisms of free

Mat. Sbornik N.S. 26(78), 589-603

(1951). (Russian)

The subsystems of an associative system A form a lattice L . If two systems A_1 and A_2 are isomorphic or anti-isomorphic, then the lattices L_1 and L_2 are isomorphic, but the converse isomorphism of L_1 and L_2 , called a structural isomorphism of A_1 and A_2 , is a weaker relationship. It is shown that an arbitrary system A can be embedded into two structurally isomorphic systems A_1 and A_2 , which are neither isomorphic nor anti-isomorphic, and in such a way that the structural isomorphism between A_1 and A_2 carries every subsystem of A into itself. This is shown by a simple construction. The main part of the paper is then devoted to showing that an associative system B structurally isomorphic to a free system A is also free, and the correspondence between B and A is an isomorphism or an anti-isomorphism.

Marshall Hall (Washington, D. C.)

Sources: Mathematical Reviews,

Vol. 13 No. 2

Spur 132

PETROPAVLOVSKAYA, R.V.

89

Petropavlovskaya, R. V. On the determination of a group
by the structure of its subsystems. Mat. Sbornik N.S.
29(71), 63-78 (1951). (Russian)

A group G may be considered as an associative system (semigroup). If G contains elements of infinite order, then G will have subsystems which are not subgroups. The subsystems of an associative system will form a lattice, and systems A_1 and A_2 are said to be structure isomorphic if the corresponding lattices are isomorphic. The author endeavours to characterize groups in terms of their lattices of subsystems. It is shown that a system A , structure isomorphic to a group G containing an element of infinite order, will be a group G , and this isomorphism will make subgroups correspond. Also if a group G is abelian and contains an element of infinite order, a structure isomorphism between G and some other G_1 is in fact a group isomorphism. Similarly if a group G contains two independent elements of infinite order which permute, then a structure isomorphism between G and some other G_1 is in fact a group isomorphism.

Marshall Hall (Washington, D.C.).

Source: Mathematical Reviews.

No. 3

*Small
of*

PETROPAVLOVSKAYA, R.V.

USSR/Mathematics - Modern Algebra,
Expansibility

21 Dec 51

"The Expansibility, in Direct Sum, of Structure of
Subsystems of an Associative System," R. V. Pet-
ropavlovskaya

"Dok Ak Nauk SSSR" Vol LXXXI, No 6, pp 999-1002

Derives certain results connected with the concepts
of an associative system, complete structure, ex-
pansibility of complete structure in direct sum of
substructures. Gives an exact definition of these
concepts. Submitted 11 Jun 51 by Acad V. I.
Smirnov.

215P40

PETROPAVLOVSKAYA, R.V. (Leningrad)

Existence and uniqueness of the solution for a system of differential equations of a certain class. Mat.sbor. 36 no.1:149-162 Jan '55.
(MLRA 8:2)
(Differential equations)

~~PETROPAVLOVSKAYA, R. V.~~

✓ Petropavlovskaya, R. V. On oscillation of solutions of the equation $u'' + b(x)u = 0$. Dokl. Akad. Nauk SSSR (N.S.) 105 (1955), 29-31. (Russian)

Let $p(x)$ be continuous and bounded from below on $a \leq x < \infty$. Then a sufficient condition for the solutions of $u'' + p(x)u = 0$ to be oscillatory is that $\int_a^x p(t)dt$ should not tend as $x \rightarrow \infty$ to either a finite or an infinite limit; the more restrictive condition that $\int_a^x p(t)dt$ should not have a mean-value as $x \rightarrow \infty$ is contained in a result of P. Hartman [Amer. J. Math. 74 (1952), 389-400, criterion III, MR 14, 50, where another result is cited], who on the other hand weakened the half-boundedness condition. Next are three sets of sufficient conditions for non-oscillation. One of these requires the existence of a function $\phi(x)$ such that either $0 \leq \int_a^x p\phi dt + C \leq -\phi'$, or $-\phi' \leq \int_a^x p\phi dt + C \leq 0$, while another requires that

$$|C + \int_a^x (\phi + \phi^2)dt| \leq \phi.$$

Lastly there is the result that if $u'' + p_r(x)u = 0$, $r=1, 2$, both non-oscillatory, then so is

$$u'' + (\alpha p_1(x) + (1-\alpha)p_2(x))u = 0,$$

for $0 < \alpha < 1$. Several corollaries are noted. There are no proofs; these may, the reviewer notes, be based on the Riccati-equation method, used by Hartman (loc. cit.).

F. V. Atkinson (Canberra).

Transactions of the Third All-union Mathematical Congress (Cont.)
Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts. Izdatel'stvo AN SSSR, Moscow,
Petropavlovskaya, R. V. (Leningrad). On the Oscillations of
Differential Equation $u'' = f(u, u', t)$. 65

Pul'kin, S. P. (Kuybyshev). Tricomi Singular Problem.
(of Tricomi). 65-66

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Mention is made of Lur'ye, A. I., Yerugin, N. P. and
Pliss, V. A.

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Qualitative Theory of Partial Differential Equations of
Second Order. Card 20/80 68-69

Petropavlovskaya, R. V.

Petropavlovskaya, R. V. On continuation of solutions of a system of differential equations, Vestnik Leningrad. Univ. 11 (1956), no. 7, 40-59. (Russian)

Let (1): $\dot{x} = f(t, x)$, x, f being n -vectors; let G be a domain of x space, $J = (p, q)$ an open interval (finite or infinite); the assumption is made that each component of f is continuous in $J \times G$ except at isolated values of t in J (not necessarily the same for all components) where it tends to infinity. A solution is a continuous vector satisfying the equation at all non singular points. Theorem 1: Assume that f satisfies in the neighborhood of each $(t, x) \in J \times G$ a condition of Carathéodory, $|f| \leq M(t)$, M summable, and that a solution is defined in the left neighborhood of $t=T \in J$ (in any case T is a finite value); then, when $t \rightarrow T - 0$, either $x(t)$ tends to an interior point of G or enters a neighborhood of the boundary of G and stays there for all t in a certain left neighborhood of T (if f is continuous in $J \times G$ this reduces to a theorem of Brugin [Prikl. Mat. Meh. 15 (1951), 55-58, MR 12, 611]; the last part of the statement was overlooked by J. L. Massera in his review of Brugin's paper in Zbl. Math. 42 (1952), 93 and probably also by J. G. Wendel in the MR review). Theorem 2: Assume that G consists of the whole x space

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with the exception of a set of isolated points and that there is an $r \geq 0$ such that if $t \in J$, $\|x\| \geq r$, we have $\|f\| \leq A(t, \|x\|)$, where all solutions of $\dot{x} = A(t, x)$ are defined in a left neighborhood of q ; then any solution of (1) is either continuable in a left neighborhood of q or else there is a $T < q$ such that if $t \rightarrow T$, $x(t)$ tends to one of the boundary points of G . Theorem 3: If the inequality in Theorem 2 is replaced by $\|f\| \leq C(t) \cdot L(\|x\|)$, where C is continuous except at isolated values of t and L is defined in any interval completely intersected by J and L is continuous if f and $(i) - (iii)$ hold, each solution of (1) either exists in J or there is a $T \in J$ such that for $t \rightarrow T$ the solution tends to one of the boundary points of G . If J is the whole line, $r=0$, $C=1$ this leads to a criterium of Wintner [Amer. J. of Math. 67 (1945), 277-284; MR6 225]; examples show that (i) Theorem 2 is essentially more general than Theorem 3; (ii) even if f is continuous everywhere it is in general too restrictive to choose C

continuous in Theorem 3 (in particular this shows that Theorem 3 is essentially more general than Wintner's criterium); (iii) no criterium relying only on the norm of f can be a necessary condition, because an example ($n=1$) is given where the solutions of $\dot{x}=f$ are continuable while those of $\dot{x}=-f$ are not. Other similar results are proved

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of which the following is typical: If there is an $r > 0$ such that when $t \in J$, $\|x\| \geq r$, we have $|x'| \geq C(t)\|x\| \cdot L(\|x\|)$ with C continuous and positive $\int_0^\infty C dt = \infty$ for any $T \in J$, L continuous and positive $\int_r^\infty dr/L(r) < \infty$; then if (T_1, T_2) is the maximum interval where a certain solution may be continued, either $T_2 < q$ or there exists a t_0 , $T_1 \leq t_0 < T_2$ such that $\|x(t)\| > r$ for $T_1 < t < t_0$, $< r$ for $t_0 < t < T_2$.

J. L. Massera (Montevideo).

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S.M.J. (u/p)

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✓ Petropavlovskaya, R. V. Associative systems that are lattice-isomorphic to a given group. I. Vestnik Leningr. Univ. 11 (1956), no. 13, 5-35. (Russian)

Two associative systems are said to be lattice isomorphic if the lattices of their subsystems are isomorphic. Typical results of this paper are concerned with: A necessary and sufficient condition that the subsystems of an associative system are linearly ordered by inclusion; the associative system: lattice isomorphic to a cyclic group of prime power order; the theorem that the necessary and sufficient condition for the subgroup lattice of a group be a non-trivial direct sum of sublattices is that G be periodic and decomposes into a direct product of proper subgroups of relatively prime orders. W. T. van Est.

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Associative systems of lattice isomorphisms of the groups Part 2.
Vest. Len. un. 11 no.19:80-99 '56. (MIRA 10:1)
(Groups, Theory of)

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I-FW

Petropavlovskaya, R. V. On the oscillatory aspect of solutions of the differential equation $u'' = f(u, u', t)$. Dokl. Akad. Nauk SSSR (N.S.) 108 (1956), 339-391. (Russian)

In this paper all variables are real, and all functions are real and continuous. A solution $u(t)$ of (1) $u'' = f(u, u', t)$ with $f \in C$ for all u and u' and $t > a$, is called regular if it can be extended to $t = +\infty$. A regular solution is called oscillatory if it has a sequence $\{t_n\}$ of zeros with $t_n \rightarrow +\infty$ as $n \rightarrow \infty$. A solution of (1) which can be extended only to $T < \infty$ is called irregular. An irregular solution is

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